

REMARKS

Claims 1-10 and 12-26 are pending in the above-identified application. Claim 11 has been incorporated into claim 1 and claim 12 amended such that this claim depends from claim 1.

Unity of Invention Issues

Applicant acknowledges that the Unity of Invention Requirement has been made "final". Applicant respectfully maintains a traversal of this Requirement based on the reasons submitted with the Response filed December 26, 2007, which reasons are deemed repeated herein.

Removal of Issues under 35 USC 112

Claim 11 has been rejected under 35 USC 112, because of alleged insufficient antecedent basis. Claim 11 has now been incorporated into claim 1 thereby removing this issue. Thus, it is requested that this rejection be withdrawn.

Removal of Issues under 35 USC 102(b)

Claim 1, 3-10 and 13-16 have been rejected under 35 USC 102 (b) as being anticipated by Valcke '507 (USP 5,714,507).

Claims 1 and 13 have been rejected under 35 USC 102(b) as being anticipated by Horstmann '225 (USP 5,206,225).

Since both of the above-noted rejections did not include claim 11, and since claim 11 has been incorporated into claim 1, it is respectfully submitted that these rejections have been overcome and should now be withdrawn.

Issues under 35 USC 103(a)

Claims 11-12 have been rejected under 35 USC 103(a) as being unpatentable over Valcke '507 in view of Wu '745 (Chinese Published Abstract No. CN 1296745). This rejection is traversed based on the following reasons.

Present Invention and Its Advantages

As outlined in the present applications, the active ingredients from the triazole class are essentially insoluble in water so that the formulation of suitable aqueous solutions and, in particular, aqueous concentrates, is particularly difficult. For example, these active ingredients tend to recrystallize upon dilution with water in a tank mix (page 2, lines 10-15, of the present application). The bioregulatory active ingredients of formula (III) are quaternary ammonium salts which are usually employed in relatively larger amounts by weight than the active ingredient of the triazole class (see page 11, line 24-26). As a consequence, relatively large amounts of electrolyte have to be incorporated and this requires the addition of water to the compositions. Thus, the formulation of stable and homogenous compositions is particularly difficult when active ingredients from the triazole class are to be co-formulated with bioregulatory active ingredients of the formula (III).

The formulations F12 and F13 described in the present application demonstrate that, despite addition of benzyl alcohol, a composition including tebuconazole (a triazole), chlormequat chloride (a bioregulatory active ingredient of formula (III)), Lutensol ON30 or Lutensol ON70 (surface active ingredients) and benzyl alcohol (a solvent) disadvantageously remains a non-homogenous system. In contrast, when a carboxylic acid (e.g. propionic acid) is added to the system, advantageously clear homogenous solutions without crystals present are obtained (compare formulations F10 and F11).

Distinctions over Valcke '507

Valcke '507 discloses synergistic fungicidal compositions containing a fungicidal triazole and metconazole as well as a carrier (column 1, lines 21-26). As reflected by the examples section, Valcke '507 distinguishes between compositions for plant protection (column 14, lines 32, to column 16, line 31) and compositions for material protection such as wood protection (column 16, lines 33-46). The text in column 1, line 21, to column 7, line 53, and column 11, line 5, to column 14, line 26 relates to both composition types. However, the text in column 7, line 54, to column 8, line 47, is specifically concerned with compositions for use as agrochemicals in the protection of plants, fruit and seeds; whereas in contrast, the text in column 8, line 48, to column 14, line 23, is specifically concerned with compositions for use in wood protection. Thus, the water-dilutable homogenous concentrate, the composition of which is described in column 10, lines 14-24 of Valcke '507, is a water dilutable wood-preservative liquid. It is, however, not disclosed or intended to be used for crop protection.

Valcke '507 fails to disclose or suggest the use of the ammonium compound of formula (III) as in the composition of the present invention. Valcke '507 further fails to disclose or suggest the employment of an aliphatic carboxylic acid in a plant regulating composition, such as a fungicidal composition. Rather, Valcke '507 clearly discloses the possible use of an aliphatic carboxylic acid only in the context of a "wood-preservation" composition. Thus, clear patentable distinctions exist between the present invention and Valcke '507.

Distinctions over Wu '745

Wu '745 discloses a plant regulating composition which includes uniconazole (a triazole) and mepiquat chloride (an ammonium compound falling within the scope of formula (III)).

Wu '745 fails to disclose or suggest the use of an aliphatic carboxylic acid component as in the composition of the present invention. Thus, clear patentable distinctions exists between the present claims and Wu '745.

Reasons that Valcke '507 and Wu '745 Can Not Be Selectively Combined

Valcke '507 discloses that in view of the solubility in organic solvents exhibited by the active ingredients (i.e. the triazoles), these ingredients are well suited for applications in non-aqueous media, which is of interest in wood-preservation (column 9, lines 13-15). Valcke '507 also discloses that particularly attractive formulations comprise water-dilutable wood-preservative liquids. These must contain a suitable solubilizer in order to yield a composition which is homogeneously miscible with a predominantly aqueous medium (column 9, lines 26-50). Suitable solubilizers to be used in said water-dilutable wood-preservative liquids are listed in column 9, lines 33 to 44. It is noted that these preferred solubilizers do not include carboxylic acids. It is only with respect to water-dilutable compositions comprising the triazoles and a copper compound that carboxylic acids are to be employed as solubilizers (compare column 9, line 51, to column 10, line 66). To put it another way, Valcke '507 discloses the use of carboxylic acids only with respect to a special type of triazole form, which is a metal salt complex the triazoles form with copper ions (compare column 2, line 29, to column 3, line 7).

It is against this background that Valcke '507 fails to disclose or suggest the use of carboxylic acids for converting the otherwise non-homogeneous systems into a homogeneous formulation comprising at least one active ingredient from the class of triazoles and an electrolyte-containing component. This is further evidenced by the above-discussed comparative test results described in the present specification. Since both Valcke '507 and Wu '745 fail to even recognize these homogeneity problems both addressed and solved by the present invention, there fails to be a basis for a motivation for one skilled in the art to begin selectively combining different components from the compositions disclosed in these references.

In addition, the disclosure of Valcke '507 relating exclusively to wood-preservative compositions can not be selectively combined with the disclosure of Wu '745 relating to plant regulation compositions as attempted in the Office Action. The Office Action fails to explain why one skilled in the art would, without any disclosed basis, mix and match selective

components from the wood-preservative composition in Valcke '507 with the components of the plant regulations composition described by Wu '745.

In addition to the above, it is noted that both the triazole compound and the ammonium compound of formula (III) in the composition of the present invention exert plant growth regulation properties. The Examiner asserts that it would have been obvious to one of ordinary skill in the art to combine the teachings of Valcke '507 and Wu '745 to produce an effective fungicidal composition. However, in making this assertion, the Examiner disregards the fact that the incorporation of a bioregulatory active ingredient, e.g. a plant growth regulator, does not make sense in a wood-preservative composition. The Examiner states that Valcke '507 discloses that plant growth regulators can be added to the composition (column 11, line 10). However, this disclosure does not specifically refer to the wood-preservative compositions. In fact, a person of ordinary skill in the art would immediately appreciate that many of the other active ingredients listed in Valcke '507 (column 11, line 5 to column 12, line 64) do not qualify as suitable active ingredients for wood-preservative compositions and therefore would not contemplate using a plant growth regulator in a wood-preservative composition.

The Examiner asserts one skilled in the art would have been motivated to combine the disclosures of Valcke '507 and Wu '745 in order to receive the expected benefit of a fungicidal composition that does not only effectively eradicate the fungal species harmful to plants but also enhances the growth potential, i.e. increases chlorophyll and provides for stronger root systems, of the plant being treated with the composition. Again, this assertion applies to a crop protection product, but not to a wood-preservative composition. It is against this background that the person of ordinary skill in the art would not have been motivated to modify the water-dilutable homogenous concentrate of Valcke '507 (i.e. the water-dilutable water-preserving liquid described in column 10, lines 14-24) by incorporating a plant growth regulating agent as described in Wu '745.

Consequently, it is submitted that significant patentable distinctions exist between the present invention and both of the Valcke '507 and Wu '745 references, whether taken separately or improperly combined. Further still, the above-noted evidence of unexpected, advantageous properties based on the comparative tests described in the present specification establishes that one skilled in the art would not have viewed the attempt to selectively combine all the components of the present invention together as being "predictable". Thus, the present situation is clearly distinguished from the decision of *KSR International Co. v. Teleflex Inc.*, 82 USPQ 2d 1385, (U.S. Supreme Court 2007). Consequently, the above-noted rejection must be withdrawn.

It is submitted for the reasons above that the present claims define patentable subject matter such that this application should now be placed in condition for allowance.

If any questions arise in the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

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Respectfully submitted,

By 

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